



FortiManager 4000E

QuickStart Guide



January 13, 2014

02-505-228134-20140113

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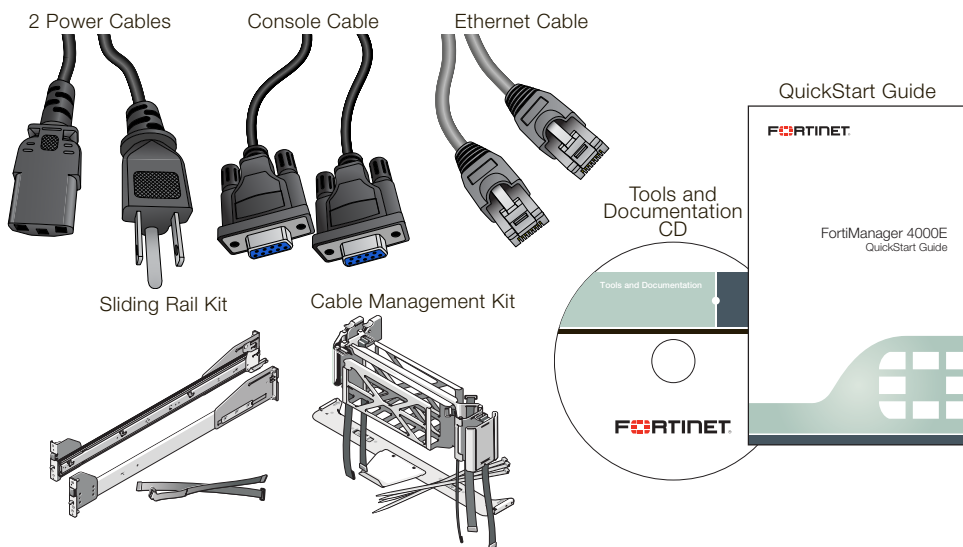
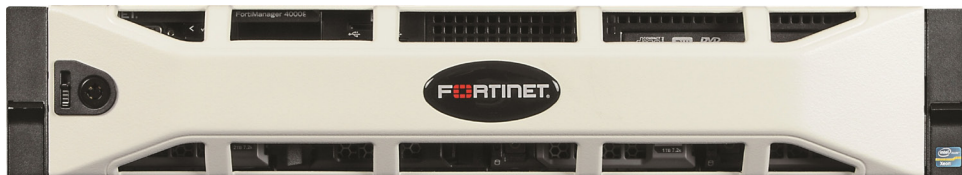
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Package Contents

Fortinet's consolidated security solutions provide an integrated set of core security and network services in a single, easy-to-manage, high-performance appliance that is capable of supporting a wide range of deployment scenarios.

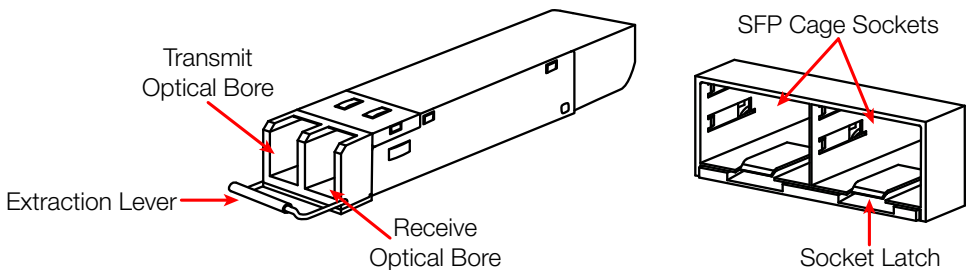
Your box contains the following:

- FortiManager 4000E
- QuickStart Guide
- Tools and Documentation CD
- 2 Power Cables
- Console Cable
- Ethernet Cable
- Sliding Rail Kit
- Cable Management Kit



Note: Accessories may not be exactly as shown.

SFP Transceivers



Caution: SFP transceivers are static sensitive devices. Use an ESD wrist strap or similar grounding device when handling transceivers.

Caution: Do not install or remove SFP transceivers while fiber-optic cables are still attached. This can cause damage to the cables, cable connectors, and the optical interfaces. It may also prevent the transceiver from latching correctly into the socket connector.

Note: Installing and removing SFP transceivers can shorten their useful life. Do not install or remove transceivers more than is necessary.

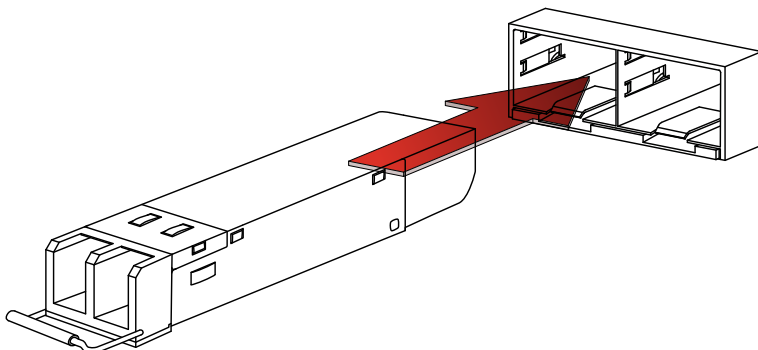
To install the SFP transceivers:

1. Ensure that you are properly grounded.
2. Remove the caps from SFP cage sockets on the front panel of the unit.
3. Position the SFP transceiver in front of the cage socket opening and ensure that the transceiver is correctly oriented.

When the transceiver is correctly oriented, the extraction lever will be level with the socket latch.

Note: SFP cage socket orientation may vary. Ensure that the SFP transceiver module is correctly oriented each time that you are inserting a transceiver.

4. Hold the sides of the SFP transceiver and slide it into the cage socket until it clicks into place.

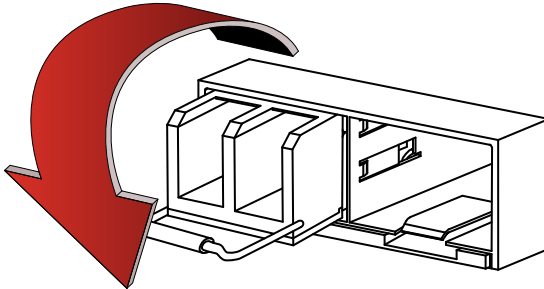


Caution: Do not force the SFP transceivers into the cage slots. If the transceiver does not easily slide in and click into place, it may not be aligned correctly or may be upside down. If this happens, remove the SFP transceiver, realign it or rotate it and slide it in again.

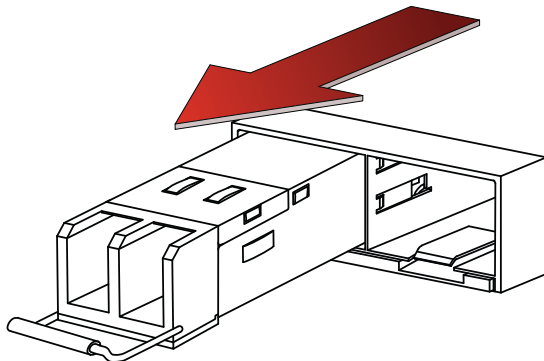
5. Press the transceiver firmly into the cage socket with your thumb.
6. Verify that the transceiver is latched correctly by grasping the sides of the transceiver and trying to pull it out without lowering the extraction lever.
If the transceiver cannot be removed, it is installed and latched correctly.
If the transceiver can be removed, reinsert it and press harder with your thumb.
If necessary, repeat this process until the transceiver is securely latched into the cage socket.

To remove the SFP transceivers:

1. Ensure that you are properly grounded.
2. If applicable, disconnect the fiber-optic cable from the transceiver connector and install a clean dust plug in the transceiver's optical bores.
3. Pull the extraction lever out and down to eject the transceiver.
If you are unable to use your finger to open the lever, use a small flat-head screwdriver or other similar tool to open the lever.



4. Hold the sides of the transceiver and carefully pull it away from the cage socket.



5. Replace the cap on the SFP cage socket and place the removed SFP transceiver into an antistatic bag.

Note: Follow proper fiber-optic handling procedures when installing and removing SFP transceivers to ensure the devices remain clean and are not damaged.

Installing Your Device

The FortiManager unit can be mounted in any standard 19 inch rack unit with the provided sliding rail kit.

Please read the Cautions and Warnings section prior to installing your device.

Caution: Electrostatic discharge (ESD) can damage your Fortinet equipment.

To install the FortiManager unit into a rack:

Caution: To avoid personal injury or damage to the unit, it is recommended that two or more people install the unit into the rack.

1. Ensure that the FortiManager unit is placed on a stable surface prior to rack-mount installation.
2. Assemble the rails and install the system in the rack following the safety instructions and the rack installation instructions in the Hardware Installation Guide available on <http://docs.fortinet.com>.
3. Verify that the spacing around the FortiManager unit conforms to requirements and that the unit is level.
4. Optionally, connect a keyboard, mouse, and monitor.
5. Connect the system's power cable(s) to the system and, if using a monitor, connect the monitor's power cable to the monitor.
6. Bend the power cable into a loop and secure the to bracket using the provided strap.
7. Plug the other end of the power cables into a grounded electrical outlet or a separate power source, such as an uninterruptible power supply (UPS) or a power distribution unit (PDU).
8. Insert one end of the provided Ethernet cable into the one of the 4 ports on the FortiManager unit. Insert the other end to a router or switch that is connected to the Internet.
9. Press the power button on the system to turn on the device.

Note: If the unit has a redundant power supply, each power cable should be connected to a different power source. In this way, if one power source fails, the other may still be operational and the unit will not lose power.

Caution: Do not place heavy objects on the unit.

Configuring Your Device

The FortiManager unit requires some basic configuration to add it to your network. These basic steps include assigning IP addresses, DNS settings, and the default gateway. Until these steps are completed traffic will not flow through the device.

The FortiManager unit can be configured using the Web-based Manager or the Command Line Interface (CLI).

This section will step you through both methods of connecting to the unit. Use whichever method you are most comfortable with.

To connect to the Web-based Manager:

1. Connect the FortiManager unit Ethernet port 1 to a management computer using the provided Ethernet cable.
2. Configure the management computer to be on the same subnet as the internal interface of the FortiManager unit:
 - IP address: 192.168.1.2
 - Netmask: 255.255.255.0
3. To access the FortiManager unit Web-based Manager, start a browser of your choice and browse to <https://192.168.1.99>.
4. Type `admin` in the *Name* field, leave the *Password* field blank, and select *Login*.

You can now proceed with configuring your FortiManager unit.

To connect to the CLI:

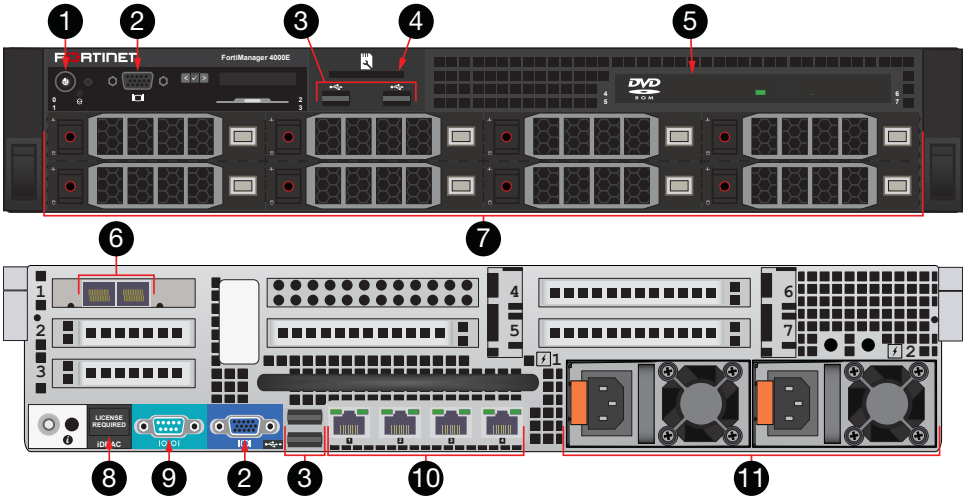
You can configure all FortiManager configuration options from the CLI using *config* commands. The CLI also includes *get*, *show*, *diagnose*, and *execute* commands for performing various configuration and monitoring tasks.

1. Connect the FortiManager unit console port to the management computer using the provided console cable.
2. Start a terminal emulation program on the management computer. Select the COM port and use the following settings:
 - Baud Rate: 9600
 - Data bits: 8
 - Parity: None
 - Stop bits: 1
 - Flow Control: None
3. Press *Enter* on your keyboard to connect to the CLI.
4. Type `admin` in the *Name* field, leave the *Password* field blank, and press *Enter*.

You can now proceed with configuring your FortiManager unit.

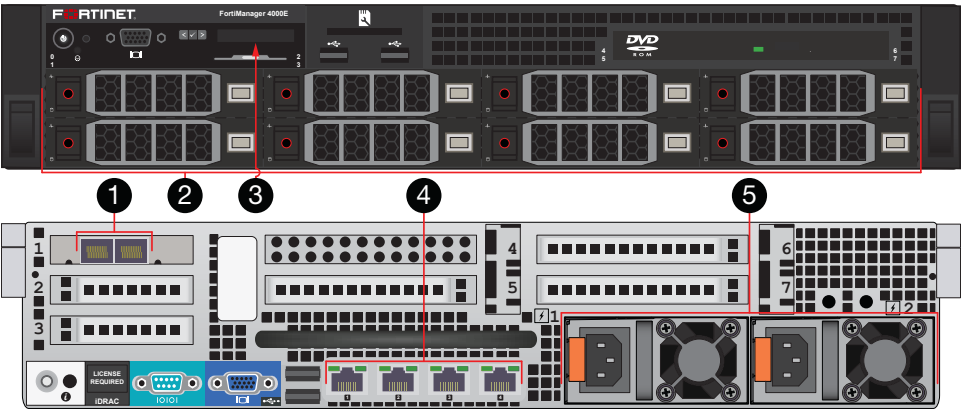
Note: If a RAID failure halts the booting process, press any key to continue booting, or press `c` to load RAID configuration utility.

Technical Specifications



#	Interface	Type	Description
1	Power Button		Power button with integrated green power LED.
2	Video	VGA	Two video ports for connecting monitors to the system.
3	USB	USB-A	Not in use.
4	Flash Media	SD	Not in use.
5	Optical Drive	SATA	Not in use.
6	SFP Ports 5 & 6	SFP	1Gbps/auto small form-factor pluggable transceiver ports.
7	Hard Drives	SATA	Eight 2TB hard drives.
8	iDRAC7 Enterprise Port		This port is disabled.
9	Console Port	DB-9	Optional serial connection to the management computer. Provides access to the CLI.
10	Ethernet Ports 1 - 4	RJ-45	Integrated Gigabit Ethernet 4-port switch connection for the internal network.
11	Power Supplies		100-240V AC, 50-60Hz, redundant power supplies.

LED Specifications



#	LED	State	Description
1	Ports 5 & 6	Amber	Port is connected at 1Gbps.
		Green	Port is connected at 10/100Mbps.
		Off	Port is offline.
2	Hard Drives	Green	The drive is online.
		Flashing Amber 4 Times per Second	The drive has failed.
		Flashing Green, Amber, and Off	The drive is predicted to fail.
		Flashing Green 2 Times per Second	The drive is rebuilding.
		Off	The drive is ready for insertion or removal.
3	LCD Panel	Blue	The system is operating normally.
		Amber	The system requires attention. An error code will be displayed.
4	Ethernet Ports Link/Activity	Flashing Green	Port is transmitting and receiving data.
		Off	Port is not connected.
4	Ethernet Ports Speed	Green	Port is connected at 1Gbps.
		Amber	Port is connected at less than 1Gbps.
		Off	Port is not connected.
5	Power Supplies	Green	The power supply is operational.
		Flashing Amber	The power supplies are mismatched.
		Off	Power is not connected.

Cautions and Warnings

Environmental Specifications

Operating Temperature — 0 to 40°C (32 to 104°F) If this device is installed in a closed or multi-unit rack assembly, the rack's ambient temperature may be greater than the room's ambient temperature. Make sure the rack environment is compatible with the manufacturer's maximum rated ambient temperature (T_{ma}).

Température ambiante élevée — 0 à 40 ° C (32 à 104 ° F) Si cet appareil est installé dans un cabinet fermé, la température ambiante du cabinet peut être supérieure à la température ambiante de la pièce . Assurez- vous que l'environnement dans le cabinet est compatible avec la température ambiante maximale du fabricant (T_{ma}).

Storage temperature — -25 to 70°C (-13 to 158°F)

Température d'entreposage — -25 à 70 ° C (-40 à 158 ° F)

Humidity — 5 to 95% non-condensing

Humidité — 5 à 95% sans condensation

Operating altitude — < 2250 m (7380 ft)

Altitude opérationnelle — <2250 m (7380 pi)

Air Flow — For rack installation, make sure that the amount of air flow required for safe operation of the equipment is not compromised. For free-standing installation, make sure that the appliance has at least 2 inches (5 cm) of clearance on each side to allow for adequate air flow and cooling.

Ventilation — Pour une installation dans un cabinet, assurez-vous que la ventilation nécessaire au fonctionnement de l'équipement n'est pas compromise. Pour une installation autonome, assurez-vous que l'appareil dispose d'au moins 2 pouces (5 cm) de dégagement de chaque côté pour permettre l'écoulement de l'air et un refroidissement adéquat.

Circuit Overloading — To avoid overloading, use the ratings on the label. Consider the equipment's connection to the supply circuit and the effect that circuit overloading might have on current protection and supply wiring.

Surtension — Pour éviter de surcharger le circuit d'alimentation, référez-vous aux notes sur l'étiquette de l'équipement . Envisagez l'effet que la surtension du circuit pourrait avoir sur la protection de surtension et le câblage d'alimentation.

Reliable earthing — Make sure all rack-mounted equipment is grounded. This includes supply connections (e .g . power strips), not only direct connections to the branch circuit.

Mise à la terre — Assurez-vous que tout l'équipement est mis à la terre . Ceci comprend les connexions d'alimentation (par exemple, les barres d'alimentation) en plus des connexions directes au circuit de dérivation.

Interference — If possible, use Shielded Twisted Pair (STP) Ethernet cables instead of Unshielded Twisted Pair (UTP).

Interférence — Si possible, utilisez des câbles Ethernet de paire torsadée blindée (STP) plutôt que de paire torsadée non blindée (UTP).

Safety

Mechanical Loading — To avoid personal injury or damage to the appliance, Fortinet recommends that 2 or more people together install the appliance into the rack. Balance the equipment to avoid uneven mechanical loading and tipping. Do not place heavy objects on the appliance.

Installation — Pour éviter des blessures ou des dommages à l'appareil, Fortinet recommande que deux personnes ou plus installent ensemble cet équipement dans un cabinet. L'installation du matériel à l'intérieur de la baie doit être effectuée de façon à éviter toute situation dangereuse liée à une installation non conforme. Ne placez pas d'objets lourds sur l'appareil, celui-ci n'étant pas conçu pour soutenir un poids additionnel.

Moving parts — Hazardous moving parts. Keep away from moving fan blades.

Pièces mobiles — Pièces mobiles dangereuses. Se tenir éloigné des pales de ventilateurs mobiles.

Electric shock / fire — To avoid risk of damage to your equipment, personal injury, or death, disconnect cables while servicing. Do not connect or disconnect cables during lightning. Do not use this product near water for example, near a bathtub, washbowl, kitchen sink or laundry tub, in a wet basement or near a swimming pool. Do not use a telephone to report a gas leak while near the leak. Do not install this equipment in a home or public area accessible to the general population. When installed in schools, this equipment must be installed in a location where access is restricted to trained personnel.

Choc électrique / feu — Débranchez les cordons de la source d'alimentation avant tout entretien. Ne pas brancher ou débrancher les câbles lors d'un orage afin de ne subir aucun dommage corporel et éviter d'endommager votre appareil. Ne pas utiliser ce produit près de l'eau par exemple, près d'une baignoire, d'un lavabo, d'un évier de cuisine ou cuve à lessive, dans un sous-sol humide ou près d'une piscine. Ne pas utiliser un téléphone pour signaler une fuite de gaz à proximité de la fuite. Le produit n'a pas vocation à être installé dans un foyer ou un lieu public pour l'ensemble de la population. Dans les écoles, ce matériel doit être installé en lieu sûr, de façon à le rendre accessible seulement aux personnels qualifiés.

Battery — Risk of explosion if the battery is replaced by an incorrect type. Do not dispose of batteries in a fire. They may explode. Dispose of used batteries according to your local regulations. IMPORTANT: Switzerland: Annex 4.10 of SR814.013 applies to batteries.

Batterie — Risque d'explosion si vous remplacez la batterie par un modèle incompatible. Jetez les piles usagées selon les réglementations locales en vigueur. IMPORTANT: Suisse: Annexe 4.10 de SR814.013 s'appliquant aux batteries.

警告

本電池如果更換不正確會有爆炸的危險

請依製造商說明書處理用過之電池

Grounding — To prevent damage to your equipment, connections that enter from outside the building should pass through a lightning / surge protector, and be properly grounded. Use an electrostatic discharge workstation (ESD) and/or wear an anti-static wrist strap while you work. In addition to the grounding terminal of the plug, on the back panel, there is another, separate terminal for earthing.

Mise à la terre — Pour éviter d'endommager votre matériel, assurez-vous que les branchements qui entrent à partir de l'extérieur du bâtiment passent par un parafoudre / parasurtenseur et sont correctement mis à la terre. Utilisez un poste de travail de décharge électrostatique (ESD) et / ou portez un bracelet anti-statique lorsque vous travaillez. Ce produit possède une borne de mise à la terre qui est prévu à l'arrière du produit, à ceci s'ajoute la mise à la terre de la prise.

Multiple power sources

Caution: Disconnect power supply cords before servicing.

Attention: Débranchez les cordons de la source d'alimentation avant tout entretien.

Regulatory Compliance

Federal Communication Commission (FCC) – USA

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received; including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if it is not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

WARNING: Any changes or modifications to this product not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

Industry Canada Equipment Standard for Digital Equipment (ICES) – Canada

CAN ICES-3 (A) / NMB-3 (A)

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

European Conformity (CE) - EU

This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.



Voluntary Control Council for Interference (VCCI) – Japan

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Bureau of Standards Metrology and Inspection (BSMI) – Taiwan

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China

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Documentation and Links

The following Fortinet web pages provide information and resources for your Fortinet product:

1. Fortinet Customer Service & Support: <https://support.fortinet.com>

On this page you can create a support account with Fortinet, register and manage your products, download updates, firmware images and release notes, and create technical support tickets.

2. Fortinet Document Library: <http://docs.fortinet.com>

This page provides the most up-to-date versions of Fortinet publications for the entire family of Fortinet products.

3. Fortinet Knowledge Base: <http://kb.fortinet.com>

This page provides Fortinet technical documentation, such as troubleshooting, how-to articles, example configurations, FAQs, technical notes, and more.

4. Technical Discussion Forums: <https://support.fortinet.com/forum>

This page allows you to communicate with other customers and Fortinet partners about Fortinet products, services, and configuration issues in a forum environment.

5. Training Services: <http://campus.training.fortinet.com>

This page provides course descriptions, availability, schedules, and locations of training programs in your area.

6. FortiGuard Threat Research and Response: <http://www.fortiguard.com>

This page provides up-to-date information on vulnerabilities and threats, and includes a virus scanner, Internet Protocol (IP) signature look-up, web filtering tools, and related information.

Tools and Documentation CD

The tools and documents on this CD are current as of shipping time.

Comments on Technical Documentation

Please send comments or information about any errors or omissions in this or any Fortinet technical documents to techdoc@fortinet.com.

Register Your Product

If you have not registered your Fortinet product, please register your product now.

Register

Register your Fortinet product in order to receive:

- Technical Support • New product features • Protection from new threats

Enregistrer

Vous devez enregistrer le produit pour recevoir:

- Support technique • Nouvelles fonctionnalités du produit • Protection contre de nouvelles menaces

Registra

La reistrazione ti permette di usufruire di:

- Supporto Tecnico • Nuove funzionalita • Protezione dalle ultime minacce

Registrar

Debe registrar el producto para recibir:

- Apoyo técnico • Nuevas funcionalidades del producto • Protección contra ataques

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- However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the Library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.
- When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not.
- Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.
- If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.) Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.
6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for your own use and reverse engineering for debugging such modifications. You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:
 - a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to compile the application to use the modified definitions.)
 - b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.
 - c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.
 - d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
 - e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.
- For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception to the above, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable. It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.
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